

Template synthesis in the nickel(II)-thiocarbohydrazid-propanone triple system

Mikhailov O., Kazymova M., Shumilova T., Chmutova G., Solovieva S.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

The complexing process proceeding in the Ni II -thiocarbohydrazide ($\text{H}_2\text{N}-\text{H}-\text{NC}(=\text{S})-\text{NH}-\text{H}_2$)-propanone triple system in EtOH solution and nickel(II)hexacyanoferrate(II) gelatin-immobilized matrix has been studied. It has been found that in the first case, template synthesis leading, as a minimum, to formation of three coordination compounds of Ni II with (N,N,S,S)-donor tetradentate ligands having NiL 1 , NiL 2 and NiL 3 compositions where L 1 is 4,6,6-trimethyl-2,3,7,8-tetraazanonen-3-di(thiohydrazide)-1,9, L 2 is 4,6,6,12-tetrametyl-1,9-dithio-2,3,7,8,10,11- hexaazatridekadien-3,11-hydrazide-1 and L 3 is 2,8,10,10,16- pentamethyl-5,13-dithio-3,4,6,7,11,12,14,15-octaazaheptadekatrien-2,7,15 is observed, whereas in the gelatin-immobilized matrix, a complexing process in the system considered does not occur. © Springer 2005.

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